

Attorney Docket No.: DE 2312.02 US
USSN: 09/932,648

PATENT
Art Unit: 2655

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): A tracking servo system for guiding a pick-up head to follow an information track, comprising:

a first means for sensing and sending a notice of displacement between the pick-up head and the center of the information track;

a second means for receiving the displacement notice and sending a first correction proportionate to the displacement;

a third means for receiving the ~~displacement notice~~ first correction to generate and sending a second correction disproportionate to the displacement; and

a fourth means for receiving the ~~first and second~~ and a third corrections, and producing a driving force proportionate to the sum of the ~~first and second correction~~ and the third correction for driving the pick-up head to follow the information track, the third correction being generated from an amplified tracking error signal.

Claim 2 (original): The system as claimed in claim 1 wherein the information track is an optical disc.

Claim 3 (original): The system as claimed in claim 1 wherein the first means is an optical sensor.

Claim 4 (original): The system as claimed in claim 1 wherein the pick-up head comprises a lens.

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Claim 5 (original): The system as claimed in claim 1 wherein the first means sends the displacement with a track error signal.

Claim 6 (currently amended): A tracking servo system for guiding a pick-up head to follow an information track, comprising:

a sensor configured to sense and send a notice of displacement between the pick-up head and the center of the information track;

a first controller configured to receive the displacement notice and send a first correction proportionate to the displacement;

a second controller configured to receive the first correction to generate the displacement notice and send a second correction disproportionate to the displacement; and

a ~~decision-making ruler driver~~ driver configured to receive the ~~first and second and a third~~ first and second corrections, and producing a driving force proportionate to the sum of the ~~first and second correction and third corrections~~ first and second corrections for driving the pick-up head to follow the information track, the third correction being generated from an amplified tracking error signal.

Claim 7 (previously presented): The system as claimed in claim 6 wherein the information track is on an optical disc.

Claim 8 (previously presented): The system as claimed in claim 6 wherein the sensor is an optical sensor.

Claim 9 (previously presented): The system as claimed in claim 6 wherein the pick-up head comprises a lens.

Claim 10 (previously presented): The system as claimed in claim 6 wherein the sensor sends the displacement with a track error signal.

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Claim 11 (currently amended): A tracking servo method for guiding a pick-up head to follow an information track, comprising the steps of:

sensing a notice of displacement;

sending said notice of displacement between the pick-up head and the center of the information track;

receiving the displacement notice and sending a first correction proportionate to the displacement;

~~receiving the displacement notice first correction and generating and sending a second correction disproportionate to the displacement; and~~

~~receiving by a decision making ruler the first and the second and a third corrections, and producing a driving force proportionate to the sum of the first and second correction and third corrections for driving the pick-up head to follow the information track, the third correction being generated from an amplified tracking error signal.~~

Claim 12 (previously presented): The method as claimed in claim 11 wherein the information track is on an optical disc.

Claim 13 (previously presented): The method as claimed in claim 11 wherein the sensor is an optical sensor.

Claim 14 (previously presented): The method as claimed in claim 11 wherein the pick-up head comprises a lens.

Claim 15 (previously presented): The method as claimed in claim 11 wherein the sensor sends the displacement with a track error signal.